

Missouri River Basin Landforms



Legend

	Flat Plains
	Smooth Plains
	Irregular Plains
	Plains With Low Hills
	Plains With Hills
	Plains With Low Mountains
	Rugged Plains
	Breaks
	Low Hills
	Hills
	Low Mountains
	Mountains
	Missouri River Basin
	Provinces
	States
	Ecoregions

0 50 100 200 KM

Our goal at the Missouri Resource Assessment Partnership (MoRAP) was to convert Hammond's manual cartographic techniques to computer analysis (GIS) techniques utilizing the National Elevation Dataset developed by the United States Geological Survey. We created an Enduring Features data layer from the following equation.

Slope + Relief = Landform

We defined two categories of slope based on the amount of gently sloping area surrounding the center cell within a circular neighborhood with a diameter of one kilometer.

10: >50% of area gently sloping
20: <50% of area gently sloping

Relief is defined as the elevation range surrounding the center cell.

01: 0 - 15 meters
02: 15 - 30 meters
03: 30 - 90 meters
04: 90 - 150 meters
05: 150 - 300 meters
06: 300 - 900 meters
07: >150 meters

The combination of slope and relief created the two-digit code listed in the legend above. For example, Flat Plains (11) have greater than fifty percent of the area in gently sloping land (10) and a total elevation range of less than 15 meters (01).

This map shows the ecoregions - as defined by Robert Bailey, U.S. Forest Service - of the Missouri River Basin. The landforms were draped over a hillshade to demonstrate the variability within and among landforms.

Map by Aaron J. Garringer, C. Diane True and the staff of the Missouri Resource Assessment Partnership
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